

AMENDMENT BASED ON ARTICLE 19

CLAIMS

1. (AMENDED) An AC-input/AC-output bidirectional power converter comprising converter cells, each of said
5 cells comprising:

a first AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

10 a second AC/DC converter whose DC side is connected to the DC side of said first AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power;

a third AC/DC converter which performs bidirectional power conversion between single-phase AC
15 power and DC power;

a fourth AC/DC converter whose DC side is connected to the DC side of said third AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power; and

20 a high-frequency transformer which is connected between the AC side of said second AC/DC converter and the AC side of said third AC/DC converter, wherein

the AC nodes of said first AC/DC
25 converters in said plurality of converter cells are connected in series with each other, and the AC nodes of said fourth AC/DC converters in said plurality of converter cells are connected in series with each other.

2. (AMENDED) A power converter as claimed in
30 claim 1, wherein said power converter is directly connected in each phase to a three-phase AC power supply system.

3. (AMENDED) A bidirectional power converter for performing bidirectional power conversion between AC and
35 DC, comprising converter cells, each of said cells comprising:

a first AC/DC converter which performs

bidirectional power conversion between single-phase AC power and DC power;

5 a second AC/DC converter whose DC side is connected to the DC side of said first AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power;

a third AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power; and

10 a high-frequency transformer which is connected between the AC side of said second AC/DC converter and the AC side of said third AC/DC converter, wherein

15 the AC nodes of said first AC/DC converters in said plurality of converter cells are connected in series with each other, and the DC nodes of said third AC/DC converters in said plurality of converter cells are connected in series with each other.

20 4. (AMENDED) A bidirectional power converter for performing bidirectional power conversion between AC and DC, comprising converter cells, each of said cells comprising:

25 a first AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power;

a second AC/DC converter whose DC side is connected to the DC side of said first AC/DC converter, and which performs bidirectional power conversion between single-phase AC power and DC power;

30 a third AC/DC converter which performs bidirectional power conversion between single-phase AC power and DC power; and

35 a high-frequency transformer which is connected between the AC side of said second AC/DC converter and the AC side of said third AC/DC converter, wherein

the AC nodes of said first AC/DC

converters in said plurality of converter cells are connected in series with each other, and the DC nodes of said third AC/DC converters in said plurality of converter cells are connected in parallel with each other.

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5. (AMENDED) A power converter as claimed in claim 3 or 4, wherein the AC side of said power converter is directly connected in each phase to a three-phase AC power supply system.

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6. (AMENDED) A motor drive equipped with a power converter as claimed in any one of claims 1 to 5.

7. (AMENDED) A BTB system comprising a power converter as claimed in claim 1 or 2.

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8. (AMENDED) A grid-linking inverter system for linking between a DC system and an AC system, comprising a power converter as claimed in any one of claims 3 to 5.

9. (DELETED)

10. (DELETED)